Dr Haberlandt — Schutzeinrichtungen

of Phaseolus

p. 23 The hypocotyl first geotropic & then apogeotropic
do not allude to, as my be different in different
plants.

25 The coats of seed by rubbing root causes bending
which increases geotropic bending — compare
with what Sachs says about earth. p. 26
shows by drawing what Cotton flexed. (mem
cell. — with Peas.

48 seedlings resist frost wonderfully
52. Winkler & Irmisch — the sinking of hypocotyl. cases in
earth — shortens so that cotyledons drawn into
earth

66. must break through earth, or at least find cracks to pass through
— Breaks through bowed to protect growing point p. 69 do.
— Epigaean break through to ground by turgescence
& stiffness of cotyledons.

69 Plants with hypogean cotyledons break through ground bowed.
— The convex side of arched hypocotyl turns up through
apogeotropism

72 Unbent..., weight of cotis. cause bowing

77 — Allium the knee in its Coti.

79 Experiments with cutting off Coti of Barley repeatedly & did not
kill

Haberlandt

(268)

p. 94. Coty of Lupinus [illegible] intermediate between subaerial & hypogean Coty. In Leguminosae all gradation between the 2 states

p. 98 The 2 sides of Coty. not nearly so much differentiated ~~[illegible]~~ as in true Leaves.